

**Amendment and Response**  
Applicant: Gopalan Raman  
Serial No.: 10/789,040  
Filed: February 27, 2004  
Docket No.: 200400043-1  
Title: FLUID EJECTION DEVICE

---

### **REMARKS**

The following Remarks are made in response to the Non-Final Office Action mailed May 2, 2006, in which claims 24-42 were withdrawn from consideration as being directed to a non-elected species, claims 1-10, 12-20, 22, and 23 were rejected, and claims 11 and 21 were objected to.

With this Amendment, claims 24-42 have been cancelled without prejudice, claims 43-50 have been added, claims 1 and 13 have been amended to clarify Applicant's invention, and allowable claims 11 and 21 have been rewritten in independent form.

Claims 1-23 and 43-50, therefore, remain pending in the application and are presented for reconsideration and allowance.

### **Claim Rejections under 35 U.S.C. § 102**

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Raman US Patent No. 5,912,685.

With this Amendment, independent claim 1 has been amended to clarify that "**the first sidewall is oriented at a first angle to the chamber and the second sidewall is oriented at a second angle to the chamber, wherein the second angle is less than the first angle.**"

With respect to the Raman patent, Applicant submits that this patent does not teach or suggest a fluid ejection device as claimed in independent claim 1. For example, the Raman patent discloses an inkjet printer printhead which employs two ink feed channels to couple an ink firing chamber to the source of ink (see, e.g., Abstract). In the embodiment of FIG. 3 of the Raman patent, the ink feed channels approach the ink firing chamber at an angle of 45 degrees, and in the embodiment of FIG. 4 of the Raman patent, the ink feed channels approach the ink firing chamber at a steeper angle (relative to a line parallel to a back wall of the ink feed chamber) of 60 degrees (see FIGS. 3 and 4; col. 6, line 64 - col. 7, line 3). In the embodiment of FIG. 3 of the Raman patent and the embodiment of FIG. 4 of the Raman patent, however, both ink feed channels of the respective embodiment approach the ink firing chamber at the same angle. As such, the Raman patent does not teach or suggest a fluid ejection device as claimed in independent claim 1 including a first sidewall oriented at a first

**Amendment and Response**

Applicant: Gopalan Raman

Serial No.: 10/789,040

Filed: February 27, 2004

Docket No.: 200400043-1

Title: FLUID EJECTION DEVICE

---

angle to the chamber and a second sidewall oriented at a second angle to the chamber, wherein the second angle is less than the first angle.

In view of the above, Applicant submits that independent claim 1 is patentably distinct from the Raman patent and, therefore, is in a condition for allowance. Furthermore, as dependent claims 2-8 and 43-46 further define patentably distinct claim 1, Applicant submits that these dependent claims are also in a condition for allowance. Applicant, therefore, respectfully requests that the rejection of claims 1-8 under 35 U.S.C. 102(b) be reconsidered and withdrawn, and that claims 1-8 and 43-46 be allowed.

Claims 13-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Burke et al. US Patent No. 5,666,143.

With this Amendment, independent claim 13 has been amended to clarify that **"the island is substantially rectangular and has a first chamfered corner along the first fluid channel and a second chamfered corner along the second fluid channel, wherein the first chamfered corner is oriented at a first angle and the second chamfered corner is oriented at a second angle less than the first angle."**

With respect to the Burke et al. patent, Applicant submits that this patent does not teach or suggest a fluid ejection device as claimed in independent claim 13. For example, the Burke et al. patent discloses an inkjet printer printhead with two ink feed channels coupled to one ink firing chamber and an island of the barrier layer separating one ink feed channel from the other ink feed channel (see, e.g., Abstract). The barrier material island 305 of the Burke et al. patent is essentially teardrop shaped, with the blunt end forming one wall of the firing chamber and the tail end facing the ink feed supply (see FIG. 5; col. 5, lines 15-19). The tail end of the barrier material island 305 of the Burke et al. patent, however, is symmetrical. The Burke et al. patent, therefore, does not teach or suggest a fluid ejection device as claimed in independent claim 13 including an island that is substantially rectangular and has a first chamfered corner along a first fluid channel and a second chamfered corner along a second fluid channel, wherein the first chamfered corner is oriented at a first angle and the second chamfered corner is oriented at a second angle less than the first angle.

In view of the above, Applicant submits that independent claim 13 is patentably distinct from the Burke et al. patent and, therefore, is in a condition for allowance. Furthermore, as dependent claims 14-20 and 48-50 further define patentably distinct claim

**Amendment and Response**  
Applicant: Gopalan Raman  
Serial No.: 10/789,040  
Filed: February 27, 2004  
Docket No.: 200400043-1  
Title: FLUID EJECTION DEVICE

---

13, Applicant submits that these dependent claims are also in a condition for allowance. Applicant, therefore, respectfully requests that the rejection of claims 13-19 under 35 U.S.C. 102(b) be reconsidered and withdrawn, and that claims 13-20 and 48-50 be allowed.

**Claim Rejections under 35 U.S.C. § 103**

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Raman in view of Pidwerbecki et al. US Patent No. 6,161,923. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Raman in view of Burke et al.

With this Amendment, dependent claims 9, 10, and 12 have been amended to depend directly or indirectly from allowable claim 11. The rejections of claims 9, 10, and 12 under 35 U.S.C. 103(a), therefore, are rendered moot.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burke et al. in view of Raman.

As outlined above, Applicant has amended independent claim 13 (from which claim 20 depends) to clarify that **"the island is substantially rectangular and has a first chamfered corner along the first fluid channel and a second chamfered corner along the second fluid channel, wherein the first chamfered corner is oriented at a first angle and the second chamfered corner is oriented at a second angle less than the first angle."** As amended independent claim 13 is believed to be in allowable form, Applicant respectfully submits that claim 20 is allowable in dependent form. Applicant, therefore, respectfully requests that the rejection of claim 20 under 35 U.S.C. 103(a) be reconsidered and withdrawn, and that claim 20 be allowed.

Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burke et al. in view of Pidwerbecki et al.

With this Amendment, claims 22 and 23 have been amended to depend directly or indirectly from allowable claim 21. The rejection of claims 22 and 23 under 35 U.S.C. 103(a), therefore, is rendered moot.

**Amendment and Response**

Applicant: Gopalan Raman

Serial No.: 10/789,040

Filed: February 27, 2004

Docket No.: 200400043-1

Title: FLUID EJECTION DEVICE

---

**Allowable Subject Matter**

Claims 11 and 21 are objected to as being dependent upon a rejected base claim and are indicated as being allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

With this Amendment, Applicant has rewritten allowable claim 11 in independent form to include all of the limitations of the base claim (claim 1) and any intervening claims (none). Accordingly, Applicant has amended claims 9, 10, and 12 to depend directly or indirectly from rewritten independent claim 11. As rewritten claim 11 is now believed to be in allowable form, Applicant respectfully submits that dependent claims 9, 10, and 12 are allowable in dependent form. Applicant, therefore, respectfully requests that the objection to claim 11 be withdrawn and that claims 9, 10, 11, and 12 be allowed.

With this Amendment, Applicant has rewritten allowable claim 21 in independent form to include all of the limitations of the base claim (claim 13) and any intervening claims (claim 15). Accordingly, Applicant has amended claims 22 and 23 to depend directly or indirectly from rewritten independent claim 21. In addition, Applicant has added new claim 47 to depend directly or indirectly from rewritten independent claim 21. As rewritten claim 21 is now believed to be in allowable form, Applicant respectfully submits that dependent claims 22, 23, and 47 are allowable in dependent form. Applicant, therefore, respectfully requests that the objection to claim 21 be withdrawn and that claims 21, 22, 23, and 47 be allowed.

**Amendment and Response**

Applicant: Gopalan Raman

Serial No.: 10/789,040

Filed: February 27, 2004

Docket No.: 200400043-1

Title: FLUID EJECTION DEVICE

**CONCLUSION**

In view of the above, Applicant respectfully submits that pending claims 1-23 and 43-50 are all in a condition for allowance and requests reconsideration of the application and allowance of all pending claims.

Any inquiry regarding this Amendment and Response should be directed to either James R. McDaniel at Telephone No. (858) 655-4157, Facsimile No. (858) 655-5859 or Scott A. Lund at Telephone No. (612) 573-2006, Facsimile No. (612) 573-2005. In addition, all correspondence should continue to be directed to the following address:

**Hewlett-Packard Company**  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, Colorado 80527-2400

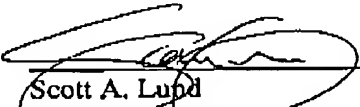
Respectfully submitted,

Gopalan Raman,

By,

DICKE, BILLIG & CZAJA, PLLC  
Fifth Street Towers, Suite 2250  
100 South Fifth Street  
Minneapolis, MN 55402  
Telephone: (612) 573-2006  
Facsimile: (612) 573-2005

Date: July 27, 2006  
SAL:hsf

  
Scott A. Lund  
Reg. No. 41,166

**CERTIFICATE UNDER 37 C.F.R. 1.8:** The undersigned hereby certifies that this paper or papers, as described herein, are being facsimile transmitted to the United States Patent and Trademark Office, Fax No. (571) 273-8300 on this 27<sup>th</sup> day of July, 2006.

By   
Name: Scott A. Lund